

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/686,529  
Source: IFW/6  
Date Processed by STIC: 7/25/05

***ENTERED***



IFW16

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/686,529

DATE: 07/25/2005  
TIME: 09:03:02

Input Set : A:\10686529.txt  
Output Set: N:\CRF4\07252005\J686529.raw

3 <110> APPLICANT: Hellinga, Homme W.  
4 Looger, Loren L.  
6 <120> TITLE OF INVENTION: Biosensor  
8 <130> FILE REFERENCE: 1579-863  
10 <140> CURRENT APPLICATION NUMBER: US 10/686,529  
11 <141> CURRENT FILING DATE: 2003-10-16  
13 <150> PRIOR APPLICATION NUMBER: US 60/418,359  
14 <151> PRIOR FILING DATE: 2002-10-16  
16 <160> NUMBER OF SEQ ID NOS: 3  
18 <170> SOFTWARE: MS Word  
20 <210> SEQ ID NO: 1  
21 <211> LENGTH: 226  
22 <212> TYPE: PRT  
23 <213> ORGANISM: Escherichia coli  
25 <400> SEQUENCE: 1  
27 Ala Asp Lys Lys Leu Val Val Ala Thr Asp Thr Ala Phe Val Pro Phe  
28 1 5 10 15  
30 Glu Phe Lys Gln Gly Asp Lys Tyr Val Gly Phe Asp Val Asp Leu Trp  
31 20 25 30  
33 Ala Ala Ile Ala Lys Glu Leu Lys Leu Asp Tyr Glu Leu Lys Pro Met  
34 35 40 45  
36 Asp Phe Ser Gly Ile Ile Pro Ala Leu Gln Thr Lys Asn Val Asp Leu  
37 50 55 60  
39 Ala Leu Ala Gly Ile Thr Ile Thr Asp Glu Arg Lys Lys Ala Ile Asp  
40 65 70 75 80  
42 Phe Ser Asp Gly Tyr Tyr Lys Ser Gly Leu Leu Val Met Val Lys Ala  
43 85 90 95  
45 Asn Asn Asn Asp Val Lys Ser Val Lys Asp Leu Asp Gly Lys Val Val  
46 100 105 110  
48 Ala Val Lys Ser Gly Thr Gly Ser Val Asp Tyr Ala Lys Ala Asn Ile  
49 115 120 125  
51 Lys Thr Lys Asp Leu Arg Gln Phe Pro Asn Ile Asp Asn Ala Tyr Met  
52 130 135 140  
54 Glu Leu Gly Thr Asn Arg Ala Asp Ala Val Leu His Asp Thr Pro Asn  
55 145 150 155 160  
57 Ile Leu Tyr Phe Ile Lys Thr Ala Gly Asn Gly Gln Phe Lys Ala Val  
58 165 170 175  
60 Gly Asp Ser Leu Glu Ala Gln Gln Tyr Gly Ile Ala Phe Pro Lys Gly  
61 180 185 190  
63 Ser Asp Glu Leu Arg Asp Lys Val Asn Gly Ala Leu Lys Thr Leu Arg  
64 195 200 205  
66 Glu Asn Gly Thr Tyr Asn Glu Ile Tyr Lys Lys Trp Phe Gly Thr Glu  
67 210 215 220

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69 Pro Lys  
70 225  
73 <210> SEQ ID NO: 2  
74 <211> LENGTH: 238  
75 <212> TYPE: PRT  
76 <213> ORGANISM: Escherichia coli  
78 <400> SEQUENCE: 2  
80 Ala Ile Pro Gln Asn Ile Arg Ile Gly Thr Asp Pro Thr Tyr Ala Pro  
81 1 5 10 15  
83 Phe Glu Ser Lys Asn Ser Gln Gly Glu Leu Val Gly Phe Asp Ile Asp  
84 20 25 30  
86 Leu Ala Lys Glu Leu Cys Lys Arg Ile Asn Thr Gln Cys Thr Phe Val  
87 35 40 45  
89 Glu Asn Pro Leu Asp Ala Leu Ile Pro Ser Leu Lys Ala Lys Lys Ile  
90 50 55 60  
92 Asp Ala Ile Met Ser Ser Leu Ser Ile Thr Glu Lys Arg Gln Gln Glu  
93 65 70 75 80  
95 Ile Ala Phe Thr Asp Lys Leu Tyr Ala Ala Asp Ser Arg Leu Val Val  
96 85 90 95  
98 Ala Lys Asn Ser Asp Ile Gln Pro Thr Val Glu Ser Leu Lys Gly Lys  
99 100 105 110  
101 Arg Val Gly Val Leu Gln Gly Thr Thr Gln Glu Thr Phe Gly Asn Glu  
102 115 120 125  
104 His Trp Ala Pro Lys Gly Ile Glu Ile Val Ser Tyr Gln Gly Gln Asp  
105 130 135 140  
107 Asn Ile Tyr Ser Asp Leu Thr Ala Gly Arg Ile Asp Ala Ala Phe Gln  
108 145 150 155 160  
110 Asp Glu Val Ala Ala Ser Glu Gly Phe Leu Lys Gln Pro Val Gly Lys  
111 165 170 175  
113 Asp Tyr Lys Phe Gly Gly Pro Ser Val Lys Asp Glu Lys Leu Phe Gly  
114 180 185 190  
116 Val Gly Thr Gly Met Gly Leu Arg Lys Glu Asp Asn Glu Leu Arg Glu  
117 195 200 205  
119 Ala Leu Asn Lys Ala Phe Ala Glu Met Arg Ala Asp Gly Thr Tyr Glu  
120 210 215 220  
122 Lys Leu Ala Lys Lys Tyr Phe Asp Phe Asp Val Tyr Gly Gly  
123 225 230 235  
126 <210> SEQ ID NO: 3  
127 <211> LENGTH: 275  
128 <212> TYPE: PRT  
129 <213> ORGANISM: Escherichia coli  
131 <400> SEQUENCE: 3  
133 Met Ala Gly Ser Thr Leu Asp Lys Ile Ala Lys Asn Gly Val Ile Val  
134 1 5 10 15  
136 Val Gly His Arg Glu Ser Ser Val Pro Phe Ser Tyr Tyr Asp Asn Gln  
137 20 25 30  
139 Gln Lys Val Val Gly Tyr Ser Gln Asp Tyr Ser Asn Ala Ile Val Glu  
140 35 40 45  
142 Ala Val Lys Lys Lys Leu Asn Lys Pro Asp Leu Gln Val Lys Leu Ile

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143 50 55 60  
145 Pro Ile Thr Ser Gln Asn Arg Ile Pro Leu Leu Gln Asn Gly Thr Phe  
146 65 70 75 80  
148 Asp Phe Glu Cys Gly Ser Thr Thr Asn Asn Val Glu Arg Gln Lys Gln  
149 85 90 95  
151 Ala Ala Phe Ser Asp Thr Ile Phe Val Val Gly Thr Arg Leu Leu Thr  
152 100 105 110  
154 Lys Lys Gly Gly Asp Ile Lys Asp Phe Ala Asn Leu Lys Asp Lys Ala  
155 115 120 125  
157 Val Val Val Thr Ser Gly Thr Thr Ser Glu Val Leu Leu Asn Lys Leu  
158 130 135 140  
160 Asn Glu Glu Gln Lys Met Asn Met Arg Ile Ile Ser Ala Lys Asp His  
161 145 150 155 160  
163 Gly Asp Ser Phe Arg Thr Leu Glu Ser Gly Arg Ala Val Ala Phe Met  
164 165 170 175  
166 Met Asp Asp Ala Leu Leu Ala Gly Glu Arg Ala Lys Ala Lys Lys Pro  
167 180 185 190  
169 Asp Asn Trp Glu Ile Val Gly Lys Pro Gln Ser Gln Glu Ala Tyr Gly  
170 195 200 205  
172 Cys Met Leu Arg Lys Asp Asp Pro Gln Phe Lys Lys Leu Met Asp Asp  
173 210 215 220  
175 Thr Ile Ala Gln Val Gln Thr Ser Gly Glu Ala Glu Lys Trp Phe Asp  
176 225 230 235 240  
178 Lys Trp Phe Lys Asn Pro Ile Pro Pro Lys Asn Leu Asn Met Asn Phe  
179 245 250 255  
181 Glu Leu Ser Asp Glu Met Lys Ala Leu Phe Lys Glu Pro Asn Asp Lys  
182 260 265 270  
184 Ala Leu Asn  
185 275

**VERIFICATION SUMMARY**

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